

**REMARKS**

Claims 1-33 are pending in the application. Claim 31 has been canceled. Claims 1-7, 10-19, 23-30, and 32-33 were rejected. Claims 8, 9, 20-22 and 31 were objected to.

Applicants have amended the claims in response to the final rejection and request that the examiner enter the amendment contained herein in that they place the application in condition for allowance. Additionally, applicants submit that no further search or consideration should be required in that the claim amendments incorporate limitations previously found in dependent claims.

Claims 1-3, 4-6, 13-15, 16-18, 27, 29-30 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Franaszek et al. (US 5,729,228) in view of Bigham (US 5,544,161) and in further view of Rostoker et al. (US 5,872,784).

In response, applicants have amended the claims to more clearly point out the claimed invention. In particular, claims independent claims 1, 3, 13, and 15 now recite that the header information comprises a predictor. See, for example, page 12 of the specification for a discussion of a predictor. The predictor allows a packet to be decoded independently of other packets.

Neither Franaszek et al., Bigham, nor Rostoker teach the use and structure of a predictor as claimed in the present invention.

Inasmuch as claims 2, 4-6, 14, and 16-18 depend from claims 1, 3, 13, and 15, those claims define over the prior art at least for the above reasons.

Regarding independent claim 27, applicants have amended the claim to incorporate the limitations of claim 31, which the examiner has indicated presents allowable subject matter. Accordingly, applicants submit that claim 27 also defines over the prior art.

Inasmuch as claims 29-30 and 33 depend from claim 27, applicants submit that they also patentably define over the prior art at least by virtue of their dependence from claim 27.

Accordingly, applicants submit that claims 1-30 and 32-33 patentably define over the art of record.

**CONCLUSION**

A Notice of Allowance for claims 1-30 and 32-33 is respectfully solicited.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADEIn the claims:

Claim 31 has been canceled.

Claims 1, 3, 8, 13, 15, 20 and 27 have been amended as follows:

1. (Twice Amended) A method for parallel compression and decompression of a bitstream, comprising:

separating a bitstream into a plurality of components of a pixel;  
encoding the components using a compression algorithm;  
constructing packets from the encoded components, where at least one packet is associated with each encoded component and the at least one packet comprises header information and encoded data and wherein the header information comprises a predictor;  
combining the packets into a packetized encoded bitstream;  
separating packets from the packetized encoded bitstream using the header information;  
decoding packets in parallel using a decompression algorithm to recover the encoded data;  
constructing the plurality of components from the recovered encoded data; and  
combining the plurality of components to recover the bitstream.

3. (Twice Amended) A method for parallel compression and decompression of a bitstream, comprising:

separating a bitstream of a digitized graphic or video frame into a plurality of components by separating the graphics or video frame into separate lines;  
encoding the components using a compression algorithm;  
constructing packets from the encoded components, where at least one packet is associated with each encoded component and the at least one packet comprises header information and encoded data and wherein the header information comprises a predictor;  
combining the packets into a packetized encoded bitstream;  
separating packets from the packetized encoded bitstream using the header information;

decoding packets in parallel using a decompression algorithm to recover the encoded data;

constructing the plurality of components from the recovered encoded data; and combining the plurality of components to recover the bitstream.

8. (Amended) The method of Claim 7, wherein the header information of the at least one packet further comprises a size[, a predictor] and an alignment.

13. (Twice Amended) A system for parallel compression and decompression of a bitstream, comprising:

an encoder system comprising:

a plurality of encode units operable to receive components of a pixel separated from a bitstream and to encode the components using a compression algorithm;

the encode units further operable to construct packets from the encoded components, where at least one packet is associated with each encoded component and the at least one packet comprises header information and encoded data and wherein the header information comprises a predictor; and

a multiplexer coupled to the encode units, the multiplexer operable to combine the packets into a packetized encoded bitstream; and

a decoder system comprising:

a feeder operable to separate packets from the packetized encoded bitstream;

a plurality of decode queues, the feeder further operable to distribute the packets to the decode queues;

a plurality of decode units each associated with one of the decode queues, the decode units operable to decode packets using a decompression algorithm to recover the encoded data and to reconstruct the components; and

a demultiplexer coupled to the plurality of decode units the demultiplexer operable to combine the plurality of components to recover the bitstream.

15. (Twice Amended) A system for parallel compression and decompression of a bitstream, comprising:

an encoder system comprising:

plurality of encode units operable to receive a plurality of components comprising separate lines separated from a bitstream from a digitized graphics or video frame and to encode the components using a compression algorithm;

the encode units further operable to construct packets from the encoded components, where at least one packet is associated with each encoded component and the at least one packet comprises header information and encoded data and wherein the header information comprises a predictor; and

a multiplexer coupled to the encode units, the multiplexer operable to combine the packets into a packetized encoded bitstream; and

a decoder system comprising:

a feeder operable to separate packets from the packetized encoded bitstream;

a plurality of decode queues, the feeder further operable to distribute the packets to the decode queues;

a plurality of decode units each associated with one of the decode queues, the decode units operable to decode packets using a decompression algorithm to recover the encoded data and to reconstruct the components; and

a demultiplexer coupled to the plurality of decode units the demultiplexer operable to combine the plurality of components to recover the bitstream.

20. (Amended) The system of Claim 19, wherein the header information of the at least one packet further comprises a size[, a predictor] and an alignment.

27. (Twice Amended) A method for parallel compression of graphic data, comprising:

separating a bitstream into a plurality of scan lines;

encoding each scan line into a plurality of blocks using a lossless compression algorithm; and

constructing at least one packet containing at least one encoded block wherein  
each encoded block comprises encoded deltas wherein the deltas represent differences  
from a preceding block.